Significant Items for Eric Tharp
March 2005

1. **ID Fan Drives**: Two new ID fan variable speed drives were installed in Unit 1 on Fans 1C and 1D during the outage. The drives are manufactured by Alstom and they utilized the existing Pulse Amplitude Motors (PAM) that were originally installed. It is our intention to replace all of the drives prior to 2007. The drives are being replaced because parts are no longer available from the original manufacturer, Westinghouse. The new drives are also more efficient thus reducing auxiliary power demands and excess heat in the scrubber electrical room.

2. **Secondary Air Heater Baskets**: New baskets were installed on the Unit 1 Secondary Air Heaters during the Unit 1 outage. The new baskets were manufactured by Alstom and installed by TEI. The baskets are essentially the medium that transfers the waste heat from the flue gas to the secondary combustion air. The new baskets utilize the Alstom proprietary "Clearflow"design which is easier to clean thus reducing air heater sootblowing and increasing heat transfer. The cleaner air heater baskets also require less fan differential pressure thus reducing ID and FD fan power consumption.

3. **Repair of the Circulating Water Lines**: During the Unit 1 outage, 38 sections of circulating water line were repaired using an innovative carbon fiber design that is installed from the inside of the pipe. The carbon fiber has enough structural strength to completely replace the concrete reinforced pipe that was originally installed.

   Of the 38 sections, 37 were on the hotter return line to the cooling towers. This is because the elevated temperatures speed up the corrosion of the reinforcing wires in the pipe. The 38 sections were selected based on previous testing using eddy current technology to identify the number of broken reinforcing wires in each section of pipe. From the testing, these 38 sections were identified as having a high probability of failure in the next 3-4 years. .

4. **Repair of the Fan Stacks**: Several years ago, we surveyed the concrete and reinforcing of the cooling towers and found several areas that indicated internal corrosion of the steel reinforcement. One of the worst areas was the fan stacks were chunks of concrete were spalling off on both the inside and outsides of the stacks. During the outage, a contractor removed all of the loose material, repaired the reinforcing steel and then installed coatings to prevent the further deterioration of the reinforcing steel. This same method was used to repair the fan decks several years ago and it has proven to work well.

5. **Installation of the Unit 1 DCS System**: Phase I of the new DCS system was installed on Unit 1. This phase consisted of a replacement information computer system the same as was installed on Unit 2 last year. The new system is now up and running . Next year, Unit 2 will have installed the new all digital control system replacing the existing control panel.